

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A boost converter having voltage selectable modes comprising:
a selection terminal, wherein the selection terminal is associated with a voltage V_{in} ;
a capacitive boost circuit, wherein the capacitive boost circuit is utilized in a capacitive mode;
an inductive boost circuit, wherein the inductive boost circuit is utilized in an inductive mode;
a first comparator, wherein the first comparator is configured to compare V_{in} to a reference
voltage V_{ref} and to select the capacitive mode if $V_{in} > V_{ref}$ and to select the inductive
mode if $V_{in} < V_{ref}$.
~~having a capacitive mode and an inductive mode of operation, and a selection terminal for~~
~~selecting the capacitive or inductive mode.~~
2. (Previously Presented) The boost converter of claim 1, wherein the selection terminal is coupled to a voltage source in the capacitive mode and wherein the selection terminal is coupled to ground in the inductive mode.
3. (Currently Amended) The boost converter of claim 1, further comprising switching means a switch controller configured for performing a switching sequence, the switching sequence operative to cycle the selected capacitive or inductive mode through ~~comprising~~ an idle phase, an energy storage phase and an energy transfer phase.
4. (Currently Amended) The boost converter of claim 3 further comprising a, ~~the switching means having~~ a set of switches responsive to the switch controller to execute the switching sequence for the capacitive mode and a sub-set of the set of switches to execute the switching sequence for the inductive mode.
5. (Currently Amended) The boost converter of claim 3, wherein the switch controller ~~switching means comprising further comprises~~ a counter ~~means~~ for receiving a clock signal and

wherein the clock signal controls a transition from the energy storage phase to the energy transfer phase.

6. (Canceled) ~~The boost converter of claim 1, further comprising a first comparator being coupled to the selection terminal for determining a selection of the capacitive or inductive mode.~~

7. (Currently Amended) ~~The boost converter of claim 1,~~claim 3 further comprising a second comparator for comparing a voltage drop over an external resistive element ~~and to~~ a voltage reference in order to trigger a transition from ~~an~~ the idle phase to ~~an~~ the energy storage phase.

8. (Currently Amended) A power supply comprising:
~~means for receiving a battery a boost converter having a capacitive mode and an inductive mode, and at least first and second terminals, wherein the battery is coupled to the first terminal for selection of the capacitive mode and the battery is coupled to the second terminal for selection of the inductive mode.~~

a boost converter having voltage selectable modes, the boost converter comprising a first selection terminal and a second selection terminal;

a capacitive boost circuit, wherein the capacitive boost circuit is utilized in a capacitive mode;

an inductive boost circuit, wherein the inductive boost circuit is utilized in an inductive mode;

a mode selection circuit, wherein the mode selection circuit selects the capacitive mode if a

voltage source is connected to the first selection terminal and selects the inductive mode if the voltage source is connected to the second selection terminal.

9. (Currently Amended) A method of DC/DC conversion using a boost converter having voltage selectable modes and comprising a selection terminal, wherein the selection terminal is associated with a voltage V_{in} , a capacitive boost circuit, wherein the capacitive boost circuit is utilized in a capacitive mode and an inductive boost circuit, wherein the inductive boost circuit is utilized in an inductive mode, the method comprising:

comparing V_{in} to a reference voltage V_{ref} ;

selecting the capacitive mode if $V_{in} > V_{ref}$; and

selecting the inductive mode if $V_{in} < V_{ref}$.

~~, the method comprising the steps of:~~

~~selecting of a capacitive or an inductive mode in order to determine a switching sequence,
performing the switching sequence to provide an idle phase, an energy storage phase and an
energy transfer phase, wherein a set of switches is operated in the capacitive mode and a sub-set
of the set of switches is operated in the inductive mode.~~

10. (Canceled) ~~— The method of claim 9, whereby the capacitive or inductive mode is
selected by coupling of a selection terminal to a one of first and second predefined voltages.~~

11. (Canceled) ~~The method of claim 10, wherein the first predefined voltage is a voltage
provided by a voltage source in the capacitive mode and wherein the second predefined voltage
is ground potential in the inductive mode.~~